

In re Appln. of Williams, et al.  
Application No. 10/668,451

CLAIM AMENDMENTS:

1. (Currently Amended) A sensor catheter, comprising:  
a catheter having proximal and distal ends, a proximal end of the catheter adapted to be coupled to a processing unit;  
a sensor disposed at the distal end of the catheter; and  
a plurality of wires extending from the proximal end of the catheter to the distal end of the catheter, the plurality of wires coupled to the sensor,  
wherein the plurality of wires are divided into first and second wire bundles, each of the wires in the first and second wire bundles twisted together to reduce electromagnetic interference ~~therebetween each of the first and second wire bundles being housed in a respective sheath~~ between the wire bundles.
2. (Original) The sensor catheter of claim 1 wherein the first and second wire bundles are twisted together and disposed within an outer sheath.
3. (Currently Amended) The sensor catheter of claim 1 wherein the plurality of wires further are divided into a third wire bundle, each of the wires in the third wire bundle twisted together to reduce electromagnetic interference ~~therebetween the third wire bundle being housed in a sheath~~ between the wire bundles.
4. (Original) The sensor catheter of claim 1, wherein the first wire bundle includes a pair of wires.
5. (Original) The sensor catheter of claim 4, wherein the pair of wires is twisted together in a clockwise direction.
6. (Original) The sensor catheter of claim 4, wherein the pair of wires is twisted together in a counter-clockwise direction.
7. (Original) The sensor catheter of claim 1, wherein the second wire bundle includes a pair of wires.
8. (Original) The sensor catheter of claim 3, wherein the third bundle includes three wires.

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9. (Original) The sensor catheter of claim 3, wherein all three wire bundles are twisted together and disposed within an outer sheath.

10. (Original) The wiring arrangement of claim 1, wherein the wires in the first wire bundle are twisted together in a first direction and the wires in the second wire bundle are twisted together in a second, substantially opposite direction.

11. (Original) The wiring arrangement of claim 2, wherein the wires in the first wire bundle are twisted together in a first direction and the wires in the second wire bundle are twisted together in the first direction, and the first and second wire bundles are twisted together in a second direction substantially opposite to the first direction.

12. (Currently Amended) A sensor catheter, comprising:  
a catheter having proximal and distal ends, a proximal end of the catheter adapted to be coupled to a processing unit;  
a sensor disposed at the distal end of the catheter; and  
a plurality of wires extending from the proximal end of the catheter to the distal end of the catheter, the plurality of wires coupled to the sensor, wherein the plurality of wires are divided into first and second wire bundles, each of the wires in the first and second wire bundles twisted together to reduce electromagnetic interference between wires in the first and second wire bundles ~~each of the first and second wire bundles being housed in a respective sheath.~~

13. (Original) The sensor catheter of claim 12 wherein the first and second wire bundles are twisted together and disposed within an outer sheath.

14. (Currently Amended) The sensor catheter of claim 12 wherein the plurality of wires further are divided into a third wire bundle, each of the wires in the third wire bundle twisted together ~~the third wire bundle being housed in a sheath.~~

15. (Original) The sensor catheter of claim 12, wherein the wires in the first wire bundle are twisted together in a clockwise direction.

16. (Original) The sensor catheter of claim 15, wherein the wires in the second wire bundles are twisted together in a counter-clockwise direction.